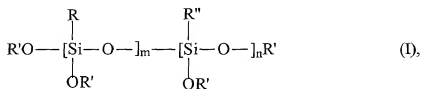


## ABSTRACT OF THE DISCLOSURE

A mixture of organoalkoxysiloxanes of formula I:



wherein R and R'' are identical or different and are methyl, ethyl, vinyl, n-propyl, i-propyl,  $\gamma$ -chloropropyl, n-butyl, i-butyl, n-pentyl, i-pentyl, n-hexyl, i-hexyl, n-heptyl, i-heptyl, n-octyl, i-octyl, hexadecyl, octadecyl or alkoxy, R' represents methyl or ethyl, n and m are identical or different and each is 0 or an integer ranging from 1 to 20, on the condition that (n+m)  $\geq$  2, is prepared by:

reacting in a first stage the constituents of (i) an organotrichlorosilane or a mixture of organotrichlorosilanes or a mixture of at least one organotrichlorosilane and tetrachlorosilane, (ii) water and (iii) alcohol, combined in a molar ratio (i) : (ii) : (iii) of 1 : (0.59 to 0.95) : (0.5 to 100), at a temperature of 0 to 150°C, which produces hydrogen chloride as a product which is removed from the system and the crude organoalkoxysiloxane product is transferred proportionately to the reaction distillation column of a subsequent second stage after an average dwell time of 0.5 to 180 minutes; and

conducting reaction and distillation in the reaction distillation column in a second stage in which volatile constituents are withdrawn from the top of the column and the organoalkoxysiloxane product is withdrawn as a bottom product, wherein the reaction-distillation column is operated at a bottom temperature of 50 to 200°C.